



10/750955

Specification

Title of Invention

Air filtering chimney to clean pollution from a city and generate electric power

Inventor: MAURICIO R. MORENO ROJAS

Citizenship: Chile

Residence: Burgos 268; Santiago - Chile

Telephone: +56-2-207-7170

Cross-Reference to related Applications

U.S. PATENT DOCUMENTS

MF

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3,894,393 A	07/1975	Carlson, Phillip R.	60/641.1
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4,367,627 A	01/1983	Pretini, Gisberto	60/641.12
4,475,342 A	10/1984	Assaf, Gad	60/641.6
4,497,177 A	02/1985	Anderson, Max F.	60/641.12
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5,608,268 A	03/1997	Senanayake, Daya R.	290/54
6,437,457 B2	08/2002	Roskey, John E.	290/55

FOREIGN PATENT DOCUMENTS

MF FR 2,436,268 05/1980

MF 12/7/05

Statement Regarding Federally Sponsored Research or Development

This invention is not Federally Sponsored for Research or Development.

Background of the Invention

FIELD OF THE INVENTION

This invention relates to a ***solar chimney*** arrangement. A ***solar chimney*** arrangement typically includes a ***solar chimney*** having an associated wind turbine, the wind turbine being energized in response to an updraft of ***solar***-heated air in the ***chimney***. Such an arrangement can be environmentally friendly.

DESCRIPTION OF RELATED ART

In a known form of ***solar chimney***, the air for use in the updraft is ***solar***-heated beneath a glass collector roof. To obtain a volume of heated air sufficient to effect sustained operation of a wind turbine of a size suitable for the commercial generation of electricity, the collector roof needs to cover a large land area, and is of a construction both expensive to erect and costly to maintain.

French patent 2,436,268 shows a ***chimney having a solar*** panel around its base, to form an air-heating chamber, whereby the air circulates normally i.e by natural in-draught from the outside to the inside of the container, to rise in the ***chimney*** stack.

U.S. Pat. N° 3,894,393 describes a chimney using a mountain as support, wherein an enclosed air mass is cooled at high altitude below the temperature of the surrounding air. The cooler, denser air flows down the duct towards lower altitude. It shows an evaporative spray at the top of the duct to cool the incoming air. This